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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/565,587

02/22/2007

Tetsuro Sato

3209-111

2274

7590 12/22/2010  
GREENBLUM & BERNSTEIN, P.L.C.  
1950 Roland Clarke Place  
Reston, VA 20191

EXAMINER

JACKSON, MONIQUE R

ART UNIT

PAPER NUMBER

1787

MAIL DATE

DELIVERY MODE

12/22/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/565,587	<b>Applicant(s)</b> SATO ET AL.	
	<b>Examiner</b> Monique R. Jackson	<b>Art Unit</b> 1787	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,6,8-11,13,14 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,8-11,13,14 and 16-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Continued Examination Under 37 CFR 1.114**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/27/10 has been entered.

2. Claims 4, 7, 12, and 15 have been canceled. New claims 17 and 18 have been added. Claims 1-3, 5, 6, 8-11, 13, 14 and 16-18 are pending in the application. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### **Priority**

3. Receipt is acknowledged of the translation of the foreign priority document which has been placed of record in the file. The Examiner notes that the foreign priority document does not provide support for the instantly claimed invention, specifically for the ultra thin primer resin layer having a thickness of 1 to 5 $\mu$ m. As evident from the English translation filed 10/27/10, the foreign application only supports a thickness range of 1 to 3 $\mu$ m, not to 5 $\mu$ m, and hence the instantly claimed invention is not afforded the benefit of the earlier filing date of the foreign application.

### **Claim Rejections - 35 USC § 103**

4. Claims 1-3, 5, 6, 8-11, 13, 14 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP'648 in view of Komiyatani et al or Hosagane et al, and in further view of JP 10-190225 (JP'225) or JP 11-148053 (JP'053), generally for the reasons recited in the prior

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office actions wherein Komiyatani et al provides a suggestion to incorporate a polyethersulfone as instantly claimed in the epoxy resin adhesive taught by JP'648 within the claimed content range or Hosagane et al provides a suggestion to incorporate an aromatic polyamide polymer in the epoxy resin adhesive taught by JP'648 within the claimed content range, but JP'648 in view of Komiyatani et al or Hosagane et al do not teach that the thin adhesive layer has a resin flow of 5% or less as instantly claimed. However, JP'225 and JP'053 both teach the benefit of having a resin flow within the claimed range for the adhesive layer on a copper foil utilized in producing printed wiring boards (JP'225, Paragraph 0009; JP'053, Paragraphs 0008-0009) and hence one having ordinary skill in the art at the time of the invention would have been motivated to modify the invention as taught by JP'648 in view of Komiyatani et al or Hosagane et al such that the composition and viscosity of the adhesive layer was adjusted to provide a resin flow within the instantly claimed range.

5. Claims 1-3, 5, 6, 8-11, 13, 14 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poutasse II in view of Komiyatani et al or Hosagane et al, and in further view of JP 10-190225 (JP'225) or JP 11-148053 (JP'053), generally for the reasons recited in the prior office actions wherein Komiyatani et al provides a suggestion to incorporate a polyethersulfone as instantly claimed in the epoxy resin adhesive taught by Poutasse II within the claimed content range or Hosagane et al provides a suggestion to incorporate an aromatic polyamide polymer in the epoxy resin adhesive taught by Poutasse II within the claimed content range, but Poutasse II in view of Komiyatani et al or Hosagane et al do not teach that the thin adhesive layer has a resin flow of 5% or less as instantly claimed. However, JP'225 and JP'053 both teach the benefit of having a resin flow within the claimed range for the adhesive layer on a copper foil utilized in

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producing printed wiring boards (JP'225, Paragraph 0009; JP'053, Paragraphs 0008-0009) and hence one having ordinary skill in the art at the time of the invention would have been motivated to modify the invention as taught by Poutasse II in view of Komiyatani et al or Hosagane et al such that the composition and viscosity of the adhesive layer was adjusted to provide a resin flow within the instantly claimed range.

### **Response to Arguments**

6. Applicant's arguments filed 10/27/10 have been fully considered but they are not persuasive and/or moot in view of the new ground(s) of rejection. With regards to the rejections under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, the Examiner notes that the rejections have been withdrawn in light of Applicant's claim amendments filed 10/27/10. With regards to the JP'648 reference, the Examiner notes that the translation filed 10/27/10 does not provide support for the claimed invention and hence the application is not afford the benefit of the earlier date in order to overcome the JP'648 reference.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R. Jackson whose telephone number is 571-272-1508. The examiner can normally be reached on Mondays-Thursdays, 10:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Monique R Jackson/  
Primary Examiner, Art Unit 1787  
December 18, 2010